Remarks

Applicant respectfully requests reconsideration of this application. No further amendments have been made to the claims. None of the claims have been allowed.

Information Disclosure Statement

Applicant wishes to disclose the status of other applications that may be considered related to the present application, as follows: serial no.: 10/315,624 (Office Action rejecting all pending claims mailed 04/09/09); serial no.: 10/315,694 (issued as US 7,493,078; 02/19/09); serial no.: 10/367,178 (Final Office Action rejecting all pending claims mailed 12/18/08); serial no.: 10/889,326 (Office Action rejecting all pending claims mailed 02/04/09); serial no.: 10/618,931 (Final Office Action rejecting all pending claims mailed 02/18/09); serial no.: 10/367,197 (Final Office Action rejecting all pending claims mailed 12/11/08); serial no.: 10/315,788 (Notice of Allowance mailed 05/15/09); serial no.: 10/395,749 (Office Action rejecting all pending claims mailed 07/16/08); serial no.: 10/407,445 (Notice of Allowance mailed 06/04/09); serial no.:11/800,543 (issued as US 7,741,665; 05/05/07); and serial no.: 10/435,005 (issued as US 7,215,660; 05/08/07).

Traversal of Claim Rejections Under 35 U.S.C. § 103(a)

Claims 45-69 stand rejected under 35 U.S.C. § 103(a) as being unpatentable Lau et al. (US 6,690,657; "Lau") in view of Oura (US 6,115,369; "Oura"). Applicant respectfully traverses this ground of rejection.

Lau teaches the user of low-power transceivers in channel-shifting RF repeaters to create a wireless network that can extend beyond each transceiver's useful range. A base station controls the allocation of time on one or more available channels between competing transmitters, and may also control the function of the channel-shifting repeaters. When a given transmitter is transmitting, repeaters in

range of that transmitter receive the signal, channel-shift the signal, and retransmit it. (Column 4, lines 6-19)

Regarding independent claims 45, 50, and 60 the Examiner contends that Lau discloses all of the claim limitations except for *receiving the data in the first frequency band during odd time intervals and transmitting on the first frequency channel during even time intervals, the second transceiver not transmitting during the odd time intervals*. In support of his position, the Examiner specifically points to Fig. 4 and the corresponding sections of the written description (e.g., col. 5, lines 39-46).

Applicant respectfully submits that Lau does not teach wirelessly receiving data and transmitting that data on the same frequency channel, as recited, for example, in claim 45. In Figure 4, Lau teaches a network 58 wherein repeaters 68 and 78 receive transmissions on a first channel (CH1) and repeats or re-transmits on a different channel (CH2). This figure is consistent with his description on col. 5, lines 39-46, wherein Lau states:

> "In FIG. 4, T/R module 62 transmits on CH1. Repeaters 68 and 78 retransmit T/R module 62's signal on CH2 to the other TR modules. Note that T/R module 64 is in a range to receive both the original signal on CH1 and the repeated signal on CH2 from repeater 68. If so equipped, module 64 may select the signal it considers the strongest, or possibly even combine the signals at some point in demodulation. The other T/R modules receive on CH2."

In contrast, independent claims 45 and 50, for example, recite a wireless repeater that both receives and transmits data on the same channel (a first channel of a first frequency band). Similarly, independent claim 60 recites a plurality of repeaters that each receive and transmit data in the same frequency band during alternate odd/even intervals. Therefore, Applicant respectfully submits that the Examiner's interpretation of Lau is mistaken.

Note, for instance, that Independent claim 45 recites a repeater with first and second transceivers that receive and transmit data on the same channel during odd/even intervals, respectively. But Lau discloses that his repeaters are receiving and transmitting *simultaneously*, which is contrary to the language of the subject claims. According to the claimed invention, data received by the first transceiver during an odd time interval is transmitted during a subsequent even interval by the second transceiver. Applicant therefore respectfully disagrees with the Examiner's interpretation of Lau. Lau clearly fails to teach the elements and limitations of the claimed invention.

Moreover, it is worth noting that he multiple transmitters and receivers referred to by Lau are source and destination devices. This is explicitly disclosed in column 5, lines 11-15, which states, "Each T/R module is connected to at least one digital data device 60, 66, 72, 76, 82 (each device being a source and/or a sink of digital data)." Lau teaches each repeater having two antennas, indicating that each of his repeaters has two independent RF transceiver subsystems, each for handling communications on a different frequency.

Oura teaches a portable telephone mobile communication system in which a Time Division Multiple Access-Time Division Duplex (TDMA-TDD) communication method is used for transmitting and receiving between base stations and mobile stations. TDMA is a technology for delivering digital wireless service using time-division multiplexing (TDM). TDMA is a well-known audio communication technique that works by dividing a radio frequency into time slots and then allocating slots to multiple calls. In this way, a single frequency can support multiple, simultaneous data channels. TDMA, for example, is used by the Global Systems for Mobile (GSM) digital cellular telephone system. TDMA technology basically shares a communications channel among several phone calls. TDD is commonly used with

TDMA in cellular phone networks to allow a number of different users to receive forward channel signals and then, in turn, transmit reverse channel signals using the same carrier frequency.

First of all, Applicant respectfully submits that Oura is non-analogous art since a person of ordinary skill would not reasonably be expected to look to the field of mobile telephone systems for a solution to the problem of wireless repeating of data at a rate of 11Mbps or greater. By way of example, Oura discloses that audio information is transmitted at data speeds of 384 kbps. (Column 4, lines 30-39) In contrast, Applicant discloses a wireless repeater transmitting data (e.g., video media content) at a data rate of 11Mbps or greater. Given the enormous difference in transmission rates and the completely different problems faced when transmitting video media content versus simple voice data, Applicant respectfully submits that a person or skill working in the field of wireless transmission of high-speed data (e.g., video at 11Mbps or greater) would not consider mobile phone communication systems to be within the same field of endeavor as the claimed subject matter.

Even if Oura were considered analogous art, Applicant respectfully submits that a person of ordinary skill would not have been motivated to modify or combine Lau with Oura. One reason why is because Lau explicitly teaches away from an approach in which wireless repeaters receive and transmit data during odd/even time intervals. For instance, Lau disparages systems that utilize CSMA/CA techniques as well as TDMA services, wherein one transceiver communicates with another transceiver on a channel only when the channel is not already in use. (See column 2, line 25 through column 3 line 29) Lau explicitly points out that the disadvantages of CSMA/CA and TDMA techniques include a throughput limitation of 1 Mbps, a range limitation of less than typical household dimension, bandwidth inadequate for multimedia, limitations in the number of active devices, and wasted bandwidth.

By teaching a system and method that uses repeaters having multiple transceivers that transmit and receive simultaneously on different frequency channels, Lau teaches away from the approach taken by Applicant. A person of skill reading Lau would therefore have been discouraged from attempting the claimed subject matter. Such a skilled person would also have lacked any motivation to attempt to combine Lau with Oura since Lau specifically teaches that TDMA approaches are limited to a 1Mbps throughput, a rate that is adequate for a mobile phone system, but which is completely inadequate to transmit video data.

Applicant therefore respectfully submits that a person of ordinary skill, upon reading the Lau reference, would be discouraged from attempting to implement a network for transmission of data at 11Mbps or greater comprising wireless repeaters that transmit and receive data on the same frequency channel during odd/even time intervals.

It is also worth mentioning that time-division multiplexing (TDM) is very different than repeating of data packets over a wireless network in the manner defined in the subject claims. TDM is a type of digital or analog multiplexing which two or more channels or bit streams are transferred apparently simultaneously as sub-channels in one communication channel, but are physically taking turns on the channel. Applicant's claimed subject matter does not rely upon multiplexing multiple bit streams on sub-channels of a communication channel. Rather, the subject claims define a counterintuitive approach of transmitting data in a single stream during odd/even time intervals at a high data rate. This approach is neither taught nor suggested by the TDM or TDMA-TDD schemes respectively disclosed in the combined teachings of Lau and Oura.

In sum, Oura fails to provide any of the teaching missing from the Lau reference. Moreover, given that Lau explicitly disparages approaches such as those

taught by Oura, Applicant respectfully submits that a person of ordinary skill in the art would have lacked any reason to combine or modify these references in the manner suggested by the Examiner. Furthermore, such an ordinary practitioner would have had no reasonable expectation of success at achieving Applicant's claimed invention in view of the Examiner's selective combination of the teachings of the cited references.

Applicant respectfully submits that for all the reasons given above that a person of ordinary skill in the art considering the cited prior art references at the time of Applicant's invention would have not been led to, or able to achieve, the subject matter of Applicant's amended claims.

Accordingly, Applicant respectfully requests that the rejections under 35 U.S.C. § 103(a) be withdrawn. Applicant respectfully submits that all remaining claims are now in condition for allowance.

Please charge any shortages of fees or credit any overcharges of fees to our Deposit Account No. 50-2060.

Respectfully submitted,
THE LAW OFFICES OF BRADLEY J. BEREZNAK

Dated: 6/29, 2009

Bradley J. Bereznak
Attorney for Applicant
Registration No. 33,474

800 West El Camino Real
Suite 180
Mt. View, CA 94040
(650) 903-2264

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to: Mail Stop RCE Amendments, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 29, 2009.

Bradley J. Bereznak — June 29, 2009 Date